

IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF MARYLAND  
(Northern Division)

IN THE MATTER OF  
THE COMPLAINT OF  
ETERNITY SHIPPING, LTD. AND  
EUROCARRIERS, S.A.  
FOR EXONERATION FROM OR  
LIMITATION OF LIABILITY

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Civil Action No.: L01CV0250

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**THIRD PARTY PLAINTIFF'S RESPONSE TO ABS AND EUROCARRIERS'  
OBJECTIONS TO PLAINTIFF'S EXPERT MICHAEL PARNELL'S SUPPLEMENTAL  
OPINION AND SUPPLEMENT TO ITS RESPONSE TO AMERICAN BUREAU OF  
SHIPPING'S MOTION FOR SUMMARY JUDGMENT**

NOW COMES Claimant, TATE & LYLE NORTH AMERICAN SUGARS, INC. ("T & L"), by and through its attorneys, ASPERGER ASSOCIATES LLC, and responds to American Bureau of Shipping's ("ABS") and Limitation Plaintiffs' ("Eurocarriers" or "EC") objections to Plaintiff's expert Michael Parnell's ("Parnell") supplemental opinion and supplements its response to ABS' Motion for Summary Judgment and Memorandum in support thereof ("ABS Memo") as set forth herein.

**RESPONSE TO LETTER OBJECTIONS FILED BY EUROCARRIERS AND ABS**

**Background**

Limitation Plaintiffs have sought to prove in this matter that the Leon I was seaworthy and, concomitantly, that the cranes and wire ropes retrofitted at the end of 1999, seven months before the casualty, were properly maintained and in good working order. They and ABS have alleged, in part, that ABS inspected, tested and approved the cranes and wires during the installation and before the ship sailed from the Chinese shipyard following the retrofit. To avoid liability and the breaking of limitation, ABS and Eurocarriers have worked jointly to present

their experts' theories that parting of the luffing wire on crane #4 was caused solely by the negligence of the bosun operating the crane on the date of the incident, and not by the incompatibility and lack of maintenance of the retrofitted 28-year old cranes and an oversized luffing wire which suffered from longstanding damage---pre-existing damage which rendered the wire unfit for use by ABS' own standards.

The letters to the Court from Eurocarriers and ABS conveniently omit the chronology of the parties' mutual efforts to conceal from T&L and this Court three written reports of observations and factual findings by Eurocarriers' surveyor Captain Heiner Popp ("Popp"). Hired by Ober, Kaler, Grimes & Shriver ("Ober, Kaler") on behalf of the vessel owners' P&I Club, the three Investigation Reports commissioned by Attorney Whitman, two of which were first produced at Popp's October 6, 2005 deposition, refute the expert opinions and defenses proffered by ABS and Eurocarriers. A chronology of events is necessary for the Court to have a full understanding of what has occurred here.

**The Failure to Disclose Captain Popp's Investigation and Reports as Required by Rule 26**

Captain Popp boarded the Leon I within two hours of the incident and over the next six days conducted a thorough investigation of the vessel<sup>1</sup>. Exhibit K, Popp at 10, 15-16. Popp authored two Inspection Reports documenting his shipboard investigation, including one referencing an inspection of the wire rope on August 9, 2000, at Chesapeake Engineering, which is where Ober, Kaler arranged to have the rope stored. See, Exhibit L, Popp August 3, 2000 Inspection Report and Exhibit M, Popp August 9/14, 2000 Inspection Report. Neither of these reports was ever timely disclosed to T&L, in violation of the clear dictates of Rule 26. The

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<sup>1</sup> Mr. Asperger and his consultants did not board the vessel until August 1<sup>st</sup>, three days after the incident. They were not on board immediately following the casualty as ABS asserts in its letter to the Court.

purpose of discovery rules is to prevent trial by ambush. See *Morgan v. Commercial Union Assurance*, 606 Fed.2d 554, 556 n. 1 (5<sup>th</sup> Cir. 1979).

Popp was never disclosed as a witness pursuant to Rule 26 during fact discovery, which closed, after several extensions, on February 5, 2004. T&L did know that Popp had been retained by Eurocarriers and served a notice for his deposition on November 25, 2002. In response to this deposition notice, counsel for Eurocarriers claimed that Popp was retained solely as a consultant and that his investigation was protected by the work product privilege<sup>2</sup>. Eurocarriers consistently maintained this claim of privilege as to Popp throughout fact discovery and asserted it again on May 3, 2004, in its responses to T&L's interrogatories:

Limitation Plaintiffs retained their own marine surveyor, Captain Heiner Popp, to investigate this incident on their behalf, and Captain Popp attended on board and began his investigation within hours of the incident on the morning of July 29, 2000. At the present time, Limitation Plaintiffs assert that Captain Popp's reports are not subject to discovery due to attorney-client privilege and attorney-work product protection.

See Exhibit N, Limitation Plaintiffs' Answers to Claimant Tate & Lyle North American Sugars Inc.'s First Set of Interrogatories, p. 12. Popp was never disclosed by Eurocarriers as an expert pursuant to FRCP Rule 26(a)(2).

On October 8, 2003, without any notice to T&L, experts for ABS and Eurocarriers jointly inspected the wire rope at Chesapeake Engineering, took measurements, photographs and even cut away and removed a section of wire from the break area. Neither Eurocarriers nor ABS ever amended their Rule 26 disclosures to reveal this inspection and their alteration of the evidence. T&L first learned of this clandestine inspection after the close of fact discovery and at the time of disclosure of the opinions of ABS' and Eurocarriers' experts. Popp's October 15, 2003 report

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<sup>2</sup> Contrary to ABS' assertion, Popp could not have been deposed by T&L at any time because ABS asserted his testimony was privileged.

of this inspection had never been disclosed during fact discovery, and was first produced during the deposition of Eurocarriers' expert Carl Cedarstav.

Although obligated by the rules to disclose, Eurocarriers continued to conceal from T&L the critical August 3 and August 9/14, 2000 Investigation Reports authored by Popp at the request of Ober, Kaler. Under cross-examination at their depositions, ABS and Eurocarriers experts acknowledged they had considered Popp's investigation and findings in formulating their opinions. Without knowledge or benefit of the withheld August 2000 reports, T&L was handicapped in its cross-examination of ABS and Eurocarriers experts regarding the details of the October 2003 inspection. It was at this clandestine October 2003 meeting that the rope was rolled out for examination by the ABS and Eurocarriers experts. The linchpin of the theory of defense shared by Eurocarriers and ABS---that the luffing wire had no significant pre-existing damage---arose out of that inspection by ABS wire rope expert Donald Sayenga ("Sayenga"):

the wire rope was in relatively good condition. Other than at the point of failure, ***the wire rope had very few broken exterior wires, little wear on the crowns of the exterior wires, and did not display recognizable evidence of corrosion.*** (Emphasis supplied), Exhibit O, Report of Donald Sayenga at 2.

The credibility of this testimony and opinion by Sayenga, as well as the very substance of the wire failure theory advanced by Eurocarriers and ABS experts, is rocked if not in fact toppled when contrasted to the previously withheld August 9/14, 2000 and October 15, 2003 investigative reports containing the well-documented observations and factual findings of Popp:

Follow up survey at premises of Chesapeake Engineering Comp. where wire is kept for further analysis, showed ***2 additional areas of decay with meat hooks in area of drum (6 to 10 wires per lay on one strand), number of broken wires exceeded permissible number. Area of wire close to boom head was found with rusty surfaces.*** (Emphasis supplied) Exhibit M, Popp August 9/14, 2000 Investigation Report

***Four nests of broken wires were found on individual strands, 10 to 15 wires broken per nest...Wire was heavily grease coated and therefore it was difficult***

*to determine how many nests of broken wire actually existed overall on entire length of wire.* (Emphasis supplied), Exhibit P, Popp October 15, 2003 Investigation Report

It is almost inconceivable that Popp and Sayenga attended the same inspection and examined the same wire.

Upon learning that Popp was a fact witness present when ABS and EC experts had examined and cut a piece from the wire rope in October of 2003, and that his observations and findings had been relied upon by ABS and Eurocarriers, T&L filed a Motion for Sanctions for Spoliation of Evidence and Sanctions for Failure to Disclose Popp and his October 2003 report. This Court's Order of February 24, 2005 allowed T&L to depose Popp as a fact witness, and to present Mr. Parnell as an expert. It was not until his October 6, 2005 deposition that it was first revealed that Eurocarriers was still withholding Popp's August 3, 2000 and August 9/14, 2000 reports. It is clear from even a cursory examination of all of Popp's reports that they contain observations and factual findings which Eurocarriers, and ABS, were compelled by the rules of discovery to timely disclose. T&L has been severely prejudiced by this conduct, which has cost considerable time and expense to uncover. As a consequence, T&L requests leave to amend its disclosures to include Popp as a fact witness and for sanctions, including fees and costs.

**Popp's Testimony Corroborates the Opinions of Parnell and Hislop, and Directly Contradicts the Opinions and Theories of the ABS and Eurocarriers Experts**

Popp's October 6, 2005 deposition was the first opportunity T&L had to explore the factual findings and observations chronicled in Popp's newly produced reports. Popp squarely contradicted the theories offered by Eurocarriers and ABS, and further gutted Sayenga's opinions with regard to the pre-existing damage to the wire rope:

Question: Now, you indicate in the last paragraph, or the last major paragraph in this section: "The overall wire was well greased and no other deficiencies were noted during initial inspection onboard

the vessel with wire on drum." Then you refer to a follow-up survey at Chesapeake Engineering.

Answer: Umh-humh, yes.

Question: And you found at that follow-up survey two additional areas of decay with meat hooks in area of drum [sic], and you indicate six to ten wires per lay on one strand, correct?

Answer: Yes.

Question: Explain that, please.

Answer: During the initial inspection the only wire I could physically look at is the one that was visible on deck. The one wire on the drum was not --

Question: Physical --

Answer: -- accessible.

Question: Right.

Answer: It was on the outside, but what is underneath you cannot see. So when -- as I say, the area was very well greased and it was difficult to see if there is any damage on it. So once we had the second inspection at Chesapeake, the wire was stowed on three pallets, we opened it up, two pallets were unrolled, and then we looked every piece of the wire over, and that's where we found the decay.

Question: When you say decaying, describe what you mean.

Answer: Broken wires, parted, bent, nests of corroded wires.

Question: Corroded wires?

Answer: I don't know if they were corroded, they were so greased. They were parted and open.

Question: Did you observe those wires closely?

Answer: I took pictures of them. We all looked at them, yes.

Question: Did you see any evidence -- and you said there was a lot of grease. So you -- did the grease obscure any evidence of corrosion, if there was any present?

Answer: I would say yes.

Question: Okay. Did you see any pitting?

Answer: No, not to my knowledge.

Question: Okay. And –

Answer: It's difficult to establish pitting except with a microscope.

Question: And is that because there was so much grease on the wire?

Answer: Yes.

Question: You indicate that the area of wire close to the boom head was found with rusty surfaces.

Answer: That's correct.

Question: That's corrosion, correct?

Answer: It's rust.

Question: And rust is corrosion, correct?

Answer: Yes. You can call it that, yes.

Question: Okay. You also indicate that in the area of the drums six to ten wires per lay, there were a number of broken wires -- excuse me, let me rephrase this. You indicate that the number of broken wires exceeded permissible number. Explain, please.

Answer: When you have an inspection on a wire, you base it on the lay.

Question: Yes.

Answer: One lay, broken wires per lay.

Question: Yes.

Answer: Ten percent, if I remember right. So if you have more than ten percent of the wires broken off, not off the whole wire, but just off the one –

Question: Of that lay?

Answer: -- lay, then --

Question: Or strand?

Answer: Just that strand, then the wire should be replaced.

Question: Okay. Based on your observation, was this -- the number of broken wires that you observed, did those breaks look fresh, or did they look like they had been there for some time?

MR. WHITMAN: Objection.

MR. SAVILLE: Objection.

Answer: I conclude that they were -- they must have been there before the accident.

Question: That was my question, okay. And why did you conclude that?

Answer: Because they were not involved in the actual area of wire parting. They were on the drums. (Exhibit K, Popp at 70-75).

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Question: What I'm interested in, Captain, is the -- you referred to in your August 14th, 2000 report which we've marked as Exhibit 2, you referred to a number of broken wires which exceeded the permissible number, and you've explained the permissible number was that number --

Answer: Ten percent.

Question: -- ten percent, which would have indicated that the wire rope needed to be replaced.

MR. WHITMAN: Objection.

Question: Am I correct?

MR. WHITMAN: Objection.

Answer: That's correct.

Question: And is that a standard in the industry?



MR. WHITMAN: Objection.

Answer: It's a very old standard. I don't know if it still applies, but in the old days it was. (Exhibit K, Popp at 77-78.)

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Question: So there were two areas, if I'm understanding you. Did you observe two areas where there were wires that were broken that exceeded ten to fifteen wires per strand?

Answer: Yes.

MR. SAVILLE: Let me just object to the last one. But keep going. (Exhibit K, Popp at 81.)

Parnell, T&L's rebuttal expert, was deposed the very next day and asked by opposing counsel how long the corrosion existed in the wire rope. Exhibit Q, Parnell Dep. at 103-104. Parnell only had one night to digest the reports and testimony from Heiner Popp's deposition, and he did in fact rely upon the evidence and testimony to support the basis for his own opinions. Exhibit Q, Parnell at 113-115. During questioning by opposing counsel, Parnell responded that the damage to the wire rope existed at least as far back as the November/December 1999 retrofit and could have been present before that time:

Question: Well, let me ask you this: Are you suggesting there that ABS during its inspection in the shipyard in China in November and December of 1999 should have been able to identify the existing damage?

Answer: I don't know if the damage was existing on that day in China.

Question: You can't say one way or the other; is that right?

Answer: I can't say, correct.

Question: So if I were to tell you that Mr. Hislop rendered an opinion that there was pre-existing damage on the wire rope while the vessel was in China, you would disagree with that statement that he could make that—

Answer: No, I wouldn't disagree with that.

Question: Why wouldn't you disagree with it?

Answer: That's Mr. Hislop's opinion.

Question: But you can't say one way or the other whether it was pre-existing damage; isn't that right?

Answer: The corrosion that I saw and the damage I saw was accruable between the day of the accident backwards to the day it left China. It could have happened anywhere in there especially with the corrosion and pitting that was there in a six month window and it could have happened before, that as well, so I don't have a window to say. Exhibit Q, Parnell at 103-104.

Following his deposition, Parnell returned to his west coast office and further considered the question posed concerning how long the corrosion damage had existed prior to the July 29, 2000 casualty. He requested additional and clearer copies of photographs for himself and his colleague, Donald L. Pellow, P.E. ("Pellow"), with whom he has consulted on such matters. Exhibit R. Within nineteen days of his deposition, Parnell supplemented his report with the opinion that the loss of material indicated that damage to the wire rope had been present at least two years prior to the incident:

1) I am of the opinion that the condition of the abraded (scrubbed and chaffed) wires in the immediate area of the failure was in existence at least two years before July 29, 2000. There is pitting corrosion imbedded in the flat scraped portions of the wires, alongside the general pitting corrosion visible within 1"-6" of the scraped areas. Note photos EC00: 2667, 2668, 2669, 2740.

2) I am of the opinion that the pitting corrosion noted on outer and inner strand wires was in existence at least two years before July 29, 2000. Note photos EC00: 2670, 2671, 2675.

Please see Mr. Pellow's attached report (C350675.pdf) which helped me to form a more definite opinion about the length of time the pitting corrosion and metal loss existed before the accident. Group Exhibit S, Parnell Supplemental Opinion, October 26, 2005, with attached Pellow Report; see also photos referenced in same.

Rule 703 of the Federal Rules of Evidence provides that experts may rely on facts or data which need not be admissible in evidence. Pellow is not being offered by T&L as a testifying expert in this case. Pellow's letter report<sup>3</sup> to Parnell predominantly describes his observations of the photos depicting the areas of pitting and corrosion:

At least some of the wire rope was in a highly corroded condition prior to it being re-lubricated in the field (Photograph EC 002675). This becomes evident after the outer wires were removed, thus revealing heavy corrosion on the inner strand wires. (Exhibit S).

Cutting and gouging of outer strand wires is evident in Photographs EC 002736 & 002739. Photograph EC 002740 shows this same condition plus the fact that the heavily corroded and pitted wires have lost a considerable amount of cross-sectional steel area.

It is obvious that the thick, grease/lubricant applied in the field only covered the outer surfaces and did not penetrate to the inner portions of the wire rope (Photograph EC 2728). This photograph, along with EC 002697, also confirms that the grease/lubricant was applied over a severely corroded wire rope in at least some areas. That is, in areas where the grease/lubricant is removed from the wire rope surface, highly corroded wires are exposed.

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Various sections of the wire rope have been subjected to heavy gouging, cutting and abrasion. This has resulted in wires being cut almost in two and being abraded through much of the cross-section.

From the appearance of the pitting corrosion of the wires (i.e., the depth of the pitting, the loss of cross-sectional steel area and the dark, red color of the corrosion), the severe nature of the rusting and corrosion of the wire rope would have been obvious at least two years or greater. (Exhibit S).

Parnell's supplemental opinion merely expands and elaborates on his responses to questions that were asked of him by counsel for ABS and Eurocarriers. Contrary to opposing

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<sup>3</sup> Pellow's report includes references to photographs which were originally taken by Popp and Chesapeake Engineering, all of which were submitted to the Coast Guard and became part of the Coast Guard report. (See Limitation Plaintiffs' Answers to Tate & Lyle's Interrogatories, Exhibit N, p. 5). ABS' argument that these photos were taken by the USCG and are inadmissible is therefore unfounded.

counsels' assertions, it is not a new opinion. Parnell is entitled pursuant to Federal Rule 703 to rely upon information obtained in part through consultation with Pellow, a renowned wire expert and colleague. Further, Parnell makes it clear that the opinion is his, not Pellow's:

Please see Mr. Pellow's attached report (C350675.pdf) *which helped me to form a more definite opinion* about the length of time the pitting corrosion and metal loss existed before the accident. (Emphasis supplied), Exhibit S, Pellow Report.

Since the supplemental opinion is solely Parnell's, straightforward and well documented by the referenced photos, there is hardly any need for the deposition of Pellow. Indeed, ABS and Eurocarriers can hardly make a case that there is anything more to be learned from a further deposition of Parnell. Had Popp, his reports and the clandestine October 2003 inspection been timely disclosed during fact discovery in accordance with the rules, these late depositions and pleadings would not have been required. Should this Court decide to allow any further discovery at this stage, T&L would request that additional attorneys' fees and costs be allowed against ABS and Eurocarriers.<sup>4</sup>

### **Conclusion**

T&L therefore respectfully requests that the supplemental opinion of Parnell stand and that T&L be granted leave to disclose Heiner Popp as a fact witness. T&L further requests that it be permitted to submit its petition for fees and costs against ABS and Eurocarriers for their ongoing discovery abuses.

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<sup>4</sup> Even assuming for the sake of argument that Parnell's opinion was entirely new, given that ABS and Eurocarriers failed to disclose the October 2003 inspection, withheld Popp's investigation and two critical reports until the day before Parnell's deposition, all in violation of the dictates of FRCP Rule 26, Parnell's opinion should be allowed in conjunction with those late disclosures and clear discovery abuses.

**SUPPLEMENT TO MOTION FOR SUMMARY JUDGMENT**

**Supplement to Statement of Facts**

25. The cranes which were retrofitted onto the Leon I were removed from the Yannis K in Dubais. Exhibit T, Terziev Dep. at 38; Exhibit U, Hislop at 106.
26. After being removed from the Yannis K, a 28-year-old scrapped vessel, the cranes were transported to the Da Dong shipyard in China. Exhibit U, Hislop at 114; Exhibit V, Graham Dep. Ex. 7, EC000069.
27. Prior to undertaking the retrofit of the Yannis K cranes to the Leon I, Eurocarriers consulted and paid ABS to obtain design input and approval. Exhibit W, EC001630-EC001652.
28. After commenting on and requiring design modifications, ABS approved the retrofit in writing. Exhibit W at EC001639-EC001642.
29. ABS assigned its surveyor Roy Graham ("Graham") to the Shanghai shipyard in November/December of 1999 to preside over and supervise the retrofit, which took approximately four weeks to complete. Exhibit X, Graham Dep. at 115.
30. Graham was on the ship almost every day for four weeks during the retrofit of the cranes to the Leon I. Exhibit X, Graham at 19.
31. As part of his responsibilities supervising the retrofit, Graham inspected the cranes, their machinery and wire ropes. Exhibit X, Graham at 22-24, 115.
32. Before the Leon I departed the Da Dong shipyard at the end of December 1999, Graham certified that the wire ropes and cranes were in good condition and appropriate for use. Exhibit Y, Graham Dep. Ex. 11.

33. Graham certified the cranes and their wires even though the load tests he presided over failed to meet ABS requirements. Exhibit Z, 9/25/2000 Transcript of statement given by Mr. Roy Graham to USCG at EC000167-000168.
34. It is important to use a crane hoisting or luffing wire rope properly sized to the sheave so that the rope lays in the groove of the sheave. Exhibit Q, Parnell at 76-78.
35. The sheave is fixed at the top of the crane mast, which is where the wire rope leaves the interior of the crane mast structure through a sheave cover guard and leads to and dead ends at the top of the boom of the crane. Exhibit Q, Parnell at 75; Exhibit AA, Parnell Dep. Ex. 5.
36. The sheave tolerances at this location are deliberately close in order to keep the wire in the sheave and to prevent the elements from getting into the machinery area inside the crane. See diagram attached as Exhibit AA (Parnell Dep. Ex. 5) and photograph attached as Exhibit BB; see also Exhibit Q, Parnell at 75-76.
37. There is relatively no clearance between the side of the sheave and the sidewall in which the sheave rests. It was not possible for the luffing wire on crane #4 to jump out of the sheave. Exhibit Q, Parnell at 114; Exhibit K, Popp at 85-86; Exhibit BB.
38. Following the casualty, Eurocarriers submitted the wire rope to I&I Sling for testing, which on December 21, 2000, certified the diameter of the rope as 28-29 mm, with a fiber core. See Exhibit CC, I&I Sling Test Certificate.
39. Although the wire rope measured 28+ millimeters, the recommended diameter for this application was 26 millimeters. Exhibit K, Popp at 18; Exhibit DD, Specification of Wire Rope at EC003268.

40. On August 24, 2004, Parnell measured the diameter of the crane #4 luffing wire with readings ranging from 27.3 to 28.5 mm. Exhibit Q, Parnell Dep. at 51.
41. During an inspection by ABS and Eurocarriers experts on October 8, 2003, Popp found the diameter of the crane #4 luffing wire to be 27.09 mm.<sup>5</sup> at the location where he took his measurement. Exhibit P, October 15, 2003 Inspection Report; see also Exhibit K, Popp at 19.
42. When the wire rope is oversized, it will ride high in the sheave groove, which will lead to scrubbing and uneven wear. Exhibit Q, Parnell at 75-78.
43. An ill-fitted and oversized wire rope is also more likely to contact and scrub or abrade against the sheave cover guard where the wire exits the top of the mast. Exhibit Q, Parnell at 75-78.
44. The wire rope diameter was too large for use on crane #4 preventing it from laying in the sheave groove, and causing it to contact the metal edge of the sheave cover guard at the top of the crane mast, resulting in metal loss and loss of lubricant which is vital to prevent corrosion and oxidation. Exhibit BB; Exhibit Q, Parnell at 125, 156-157.
45. The wire rope on crane #4 had a fiber core which violated the recommendation of the manufacturer and is not as strong as a solid wire rope. Exhibit U, Hislop at 130-131; Exhibit M, Popp August 9/14, 2000 Inspection Report; Exhibit DD, Specification of Wire Rope at EC003268.
46. During his inspection following the casualty, Popp found rope fiber core residue at the top of the crane in the area of the sheave assembly. Exhibit K, Popp at 64.

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<sup>5</sup> Popp's measurement (as well as those certified by I&I Sling and those taken by Parnell) directly contradicts the measurement taken by ABS' expert Dolan, who claims that measurements he took at the same inspection were 26mm. Exhibit P, October 15, 2003 Inspection Report; see also Exhibit K, Popp at 19.

47. The location of the break area of the wire rope was at the top of the crane mast where the wire exits the sheave cover guard above the sheave assembly. Exhibit Q, Parnell at 120-122.
48. Following the retrofit, crane number four had a nominal 20-ton capacity. Exhibit U, Hislop at 105-106.
49. On the date of the casualty, a workbasket containing two crewmembers was suspended from a hook connected to the hoisting or luffing wire of crane #4. Exhibit K, Popp at 52-55.
50. Because the deck layout of the Leon I did not properly accommodate the cranes, the workbasket could not be positioned close enough to the aft coaming of 6A to allow the men to work. Exhibit K, Popp at 52-55.
51. On the date of the accident, deck hands, supervised by the ship's officers, used ropes connected to the workbasket to pull the workbasket, from which Gonzalez and Burgos were working, closer to the aft coaming. Exhibit K, Popp at 55.
52. Captain Popp boarded the vessel within two hours of the casualty, and his investigation on board spanned six days. Exhibit K, Popp Dep. at 16.
53. Captain Popp conducted a follow-up inspection of the failed wire rope at Chesapeake Engineering on August 9, 2000, and found additional areas of decay in which the broken wires exceeded the permissible number along with rusty surfaces. Exhibit M, Popp August 9/14, 2000 Inspection Report.
54. Captain Popp also conducted a further inspection of the wire rope on October 8, 2003 with ABS and Eurocarriers experts. Exhibit K, Popp at 16.



55. In his follow up survey of the wire rope on October 8, 2003, Popp had the opportunity to open up and unroll the entire length of the wire. Exhibit K, Popp at 71.
56. There were a number of areas on the rope which exhibited wires which were broken, parted, bent and nests of corroded wires. Exhibit K, Popp at 71-72.
57. The number of broken wires per lay exceeded the permissible number (10%), which would require replacement of the rope based on industry standard. Exhibit K, Popp, pgs 71-79; Exhibit M, Popp August 9/14, 2000 Inspection Report.
58. There were several areas on the rope where the number of broken wires exceeded that allowable by ABS, as well as generally accepted industry standards requiring replacement of the wire. Exhibit Q, Parnell at 143-146; Exhibit EE, ABS Guide for Certification of Cranes at EC001312.
59. The several nests of broken and corroded wires, i.e. "areas of decay", were in a section of the rope which was on the drums at the time of the casualty, and therefore separate from and not involved in the actual area of parting. Exhibit K, Popp at 71-74.
60. The nests of broken wires pre-existed the accident because they were not in the location where the wire rope parted. Exhibit K, Popp at 73-74.
61. The wire rope was heavily greased making it difficult to determine how many nests of broken wire actually existed overall on the entire length of wire. Exhibit P, Popp October 15, 2003 Inspection Report.
62. The wire rope had been severely chaffed and cut. Exhibit Q, Parnell at 97.
63. Corrosion and pitting formed and existed for a considerable time, weakening the rope. Exhibit Q, Parnell at 70-73, 104.

64. The pre-existing damage to the wire rope had been formed by obstructional contact, tears and external stripping of the wire. Exhibit Q, Parnell at 57.
65. Additional scrubbing and abrasion occurred on the morning of July 29, 2000. Exhibit Q, Parnell at 63-67, 70-73.
66. The damage to the rope which led to the extent of the corrosion and pitting observed likely existed for as much as two years before the incident. Exhibit S, Parnell Supplemental Opinion.
67. Wire ropes are often lubricated by hand, but care must be taken so that the broken pieces of wire, also called “meat hooks”, do not cut into the applicator’s hands as he rubs the lubricant onto the wire. See Exhibit Q, Parnell at 146.
68. Captain Popp took measurements and took possession of the remnants of the workbasket. Exhibit K, Popp at 50.

### **Background**

It is well recognized in the maritime industry that vessels cannot trade in American waters if the vessels and their gear have not been inspected and approved for seaworthiness and safety by classification societies such as the ABS. T&L, its employees and stevedores who discharge cargo from vessels like the M/V Leon I rely upon classification societies such as ABS to provide approval and certifications of safety and seaworthiness only when the approval is warranted.

The casualty of July 29, 2000 resulted from the parting of the topping or luffing wire on one of the cranes aboard the Leon I during discharge operations at T&L’s dock. The Leon I was

originally designed as a gearless (without cranes) bulk freighter. Exhibit B<sup>6</sup>, pp. 13, 93-94. When Eurocarriers decided to retrofit cranes from another ship onto the Leon I, it engaged ABS to review and approve the proposed design of the retrofit. Exhibit B, pp. 29-30, 38-41. ABS supervised the retrofit. Upon completion of the installation of the retrofitted cranes, ABS approved and certified the cranes for operations. Exhibit E, pp. 18, 24, 71-72.

The Leon I was not designed for and could not properly accommodate the 28-year old cranes that ABS allowed, under its direct supervision, to be refitted from another, dissimilar ship. As a result of the negligence of ABS, the ship and her cranes were not safe or seaworthy and this resulted in the parting of the luffing wire on crane #4 which caused the deaths of two seamen, and more than \$10 million in property damage to T&L. Specifically, T&L contends that the evidence establishes that ABS:

- allowed and approved the retrofit of cranes that were neither designed nor of appropriate size for use on the ship;
- failed to consult with the crane manufacturer before allowing the retrofit of these 28-year old cranes;
- violated the crane manufacturer's recommendations and industry practice and standards in allowing the use of a luffing wire on crane #4 which was of a diameter too large for the sheave;
- violated ABS and industry standards in allowing the use of a luffing wire on crane #4 which exhibited extensive corrosion and contained nests of broken wires which exceeded ABS and accepted industry standards requiring replacement, and;

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<sup>6</sup> Exhibits A through J were filed as part of Third Party Plaintiffs' Response to American Bureau of Shipping's Motion for Summary Judgment.

- ignored the crane manufacturer's recommendations in allowing the use of a luffing wire on crane #4 that had a fiber core.

The services ABS performed for Eurocarriers in connection with the crane retrofit on the Leon I involved far more than a routine inspection. Eurocarriers consulted ABS when it decided to scrap the M/V Yannis K, another vessel under its management, and retrofit her cranes to the Leon I. Exhibit B, pp. 29-30, 38-41. The Yannis K was an older ship designed as a geared vessel (with cranes), whereas the Leon I had been designed as a gearless bulk freighter. Exhibit B, pp. 13, 93-94. The two vessels are not sister ships, being of different lengths and having different deck, hatch and hold layouts. Exhibit U, Hislop Dep. at 222.

Prior to undertaking the retrofit, Eurocarriers consulted and paid ABS to obtain design input and approval. Exhibit W, EC001630-EC001652. After commenting on and requiring design modifications, ABS approved the retrofit in writing. Exhibit W at EC001639-EC001642. The 28-year old cranes were removed from the Yannis K in Dubais (Exhibit T, Terziev Dep. at 38; Exhibit U, Hislop at 106) and transported to the Da Dong shipyard in Shanghai, China where the actual retrofit was performed. ABS assigned its surveyor Roy Graham to the Shanghai shipyard in November/December of 1999 to preside over and supervise the retrofit, which took approximately four weeks to complete. Exhibit X, Graham Dep. at 115. ABS has presented no evidence that it ever consulted the crane manufacturer concerning the retrofit, relying instead solely on Graham. As part of his responsibilities supervising the retrofit, Graham claims that he inspected the cranes, their machinery and wire ropes. Exhibit X, Graham at 22-24, 115.

Before the Leon I departed the shipyard at the end of December 1999, Graham certified that the wire ropes and cranes were in good condition and appropriate for use. Exhibit Y, Graham Dep. Ex. 11. Graham certified the cranes and their wires even though the load tests he

presided over failed to meet ABS requirements. Exhibit Z, 9/25/2000 Transcript of statement given by Mr. Roy Graham to USCG at EC000167-000168. No evidence has been presented that the luffing wire rope on crane #4 was ever replaced during the approximately seven months between the time of Graham's Shanghai shipyard inspection and certification, and the date of the casualty. The reasonable inference therefore is that the same wire rope that ABS inspected in December 1999 caused the accident in July 2000.

At approximately 9:00 a.m. on July 29, 2000, the luffing wire on crane #4 parted while the ship's crew and officers were cleaning caked sugar from the coaming of hatch 6A. The two crewmen in the basket were killed and the boom of crane #4 struck T&L's shore side gantry crane causing it to collapse into the adjacent hatch 6.

Ober, Kaler retained Captain Heiner Popp to conduct an investigation of the casualty on behalf of the owner and its insurer. Captain Popp boarded the vessel within two hours of the casualty, and his investigation on board spanned six days. Exhibit K, Popp Dep. at 16. He took measurements and took possession of the remnants of the workbasket. Exhibit K, Popp at 50. He also conducted a follow-up inspection of the wire rope on August 9, 2000 and again on October 8, 2003 with ABS and Eurocarriers experts. Exhibit K, Popp at 16, 70-71. He issued three written reports which included more than 80 photographs.

Eurocarriers identified Popp as a consultant and claimed that his investigation was protected by the work product privilege. Upon T&L's motion, and pursuant to this Court's order finding Popp was a fact witness, his deposition was taken on October 6, 2005. At the deposition, Eurocarriers produced for the first time the two detailed ship inspection reports authored by Popp. T&L's wire rope expert Parnell sat in on the deposition of Popp, as this was his first and only time to hear the facts that Popp would testify to prior to Parnell's own deposition which

took place the following day, October 7, 2005. This Supplement addresses the facts, testimony and evidence developed at the deposition of Popp, as well as Parnell's opinions, which are based in part on information first obtained during Popp's deposition. This Supplement sets forth how that information assists in establishing that there are genuine issues of material fact precluding the summary judgment requested by ABS.

### **The Casualty**

At the time of the incident, Juan Gonzalez and Joselito Burgos were assigned to and occupying a workbasket which had been placed on the Leon I by its owners solely for the purpose of performing maintenance, which on this morning consisted of cleaning the coamings of hatch 6A. (ABS Memo Par. 53; ABS Exhibit B). The basket was suspended from a hook connected to the hoisting wire of crane #4. Exhibit K, Popp at 52-55. Because the deck layout of the Leon I could not properly accommodate the cranes, the workbasket could not be positioned close enough to the aft coaming of 6A to allow the men to work. Exhibit K, Popp at 52-55. Deck hands supervised by the ship's officers used ropes connected to the workbasket to pull Gonzalez and Burgos closer to the aft coaming. Exhibit K, Popp at 55. It was during this procedure that the crane #4 luffing wire parted causing the boom to fall, killing the two crew members in the basket. During its descent, the boom of crane #4 struck the T&L shore side crane discharging from the adjacent hatch 6, causing it to collapse into the ship's hold. (ABS Memo Par. 53; ABS Exhibit B).

### **Popp's Findings Corroborate Parnell's and Hislop's Opinions and Contradict the Opinions of ABS' Experts**

The specifications produced by Eurocarriers require use of a 26mm luffing wire with a wire core as opposed to a fiber core. Exhibit DD, Specification of Wire Rope at EC003268. Popp measured the diameter of the crane #4 luffing wire at one location on October 8, 2003

during an inspection by ABS and Eurocarriers experts and found it to be 27.09 mm.<sup>7</sup> Exhibit P, October 15, 2003 Inspection Report; see also Exhibit K, Popp at 19. Popp's measurement is consistent with the measurements ranging from 27.3 to 28.5 mm taken by Parnell at his August 24, 2004 inspection. Exhibit Q, Parnell Dep. at 51. At the request of the U. S. Coast Guard following the incident, Eurocarriers submitted the wire rope to I&I Sling for testing. I&I Sling certified the diameter of the rope as 28-29 mm, on December 21, 2000. See Exhibit CC, I&I Sling Test Certificate.

Parnell explained that it is important to use a wire rope properly sized to the sheave so that the rope lays in the groove of the sheave. Exhibit Q, Parnell at 76-78. The sheave is fixed at the top of the crane mast, which is where the wire rope leaves the interior of the crane mast structure through a sheave cover guard and leads to and dead ends at the top of the boom. Exhibit Q, Parnell at 75; Exhibit AA (Parnell Dep. Ex. 5). The sheave tolerances at this location are deliberately close in order to keep the wire in the sheave and to prevent the elements from getting into the machinery area inside the crane. (See diagram attached as Exhibit AA and photograph attached as Exhibit BB; see also Exhibit Q, Parnell at 75-76).

When the wire rope is oversized, it will ride high in the sheave groove, which will lead to scrubbing and uneven wear. Exhibit Q, Parnell at 75-78. An ill-fitted and oversized wire rope is also more likely to contact and scrub or abrade against the sheave cover guard where the wire exits the top of the mast. Exhibit Q, Parnell at 75-78. While neither Popp nor any of the other experts actually measured the clearance between the sheave and the edges of the sheave cover guard where the wire exits the crane mast, Popp testified "We looked at it, and it was not possible for the wire to go in there." Exhibit K, Popp at 85-86; Exhibit BB. "There was no

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<sup>7</sup> Popp's measurement (as well as those certified by I&I Sling and those taken by Parnell) directly contradicts the measurement taken by ABS expert Dolan, who claims that measurements he took at the same inspection were 26mm. Exhibit P, October 15, 2003 Inspection Report; see also Exhibit K, Popp at 19.

indication that it [the luffing wire] had jumped out of the sheave.” Exhibit K, Popp at 36. This directly contradicts ABS’ theory of the case that the wire rope jumped out of the sheave at the top of the mast. Exhibit Q, Parnell at 114

Popp observed that “the parting of the wire appeared to have been caused at the top of the crane in the area of the sheave assembly...I observed rope residue at the top of the crane which appears to be indicating the location where the wire broke, in that vicinity.” Exhibit K, Popp at 64. Parnell measured and calculated the location of the break area and agrees with Popp that it was at the top of the crane mast where the wire exits the sheave cover guard above the sheave assembly. Exhibit Q, Parnell at 120-122.

Popp’s observations corroborate Parnell’s conclusion that because the wire rope diameter was too large for use on crane #4, it was unable to lay in the sheave groove. This caused it to ride further up where it was able to contact the metal edge of the sheave cover guard at the top of the crane mast, resulting in metal loss and loss of lubricant which is vital to prevent corrosion and oxidation. Exhibit BB, photograph of sheave; Exhibit Q, Parnell at 125, 156-157. Corrosion and pitting formed and existed for a considerable time, as long as two years before the casualty, weakening the rope. Exhibit Q, Parnell at 70-73, 104; Exhibit S, Parnell Supplemental Opinion. Additional scrubbing and abrasion occurred on the morning of July 29, 2000, causing the luffing wire to finally part even though it was bearing a relatively light load (a workbasket and 2 crew members), well within the crane’s 20-ton capacity had the rope not exhibited pre-existing damage. Exhibit Q, Parnell at 63-67, 70-73; Exhibit U, Hislop at 105-106.

There is more. In his follow up surveys of the wire rope on August 9, 2000 and October 8, 2003,<sup>8</sup> Popp had the opportunity to open up and unroll the entire length of the wire. Exhibit

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<sup>8</sup> This is the inspection for which T&L received no notice, where ABS and Eurocarriers experts snipped and removed a piece of wire from the break section of the rope.



K, Popp at 71. In addition to the break area, Popp described a number of other areas on the rope where he observed “broken wires, parted, bent, nests of corroded wires.” Exhibit K, Popp at 71-72. Popp noted that because the wire had been heavily greased, “it was difficult to determine how many nests of broken wire actually existed overall on [the] entire length of wire.” Exhibit P, Popp October 15, 2003 Inspection Report.

Popp observed that the number of broken wires per lay exceeded the permissible number (10%), which would require replacement of the rope. Exhibit K, Popp, pgs 71-74; Exhibit M, Popp August 9/14, 2000 Inspection Report. Also observed during his inspection at Chesapeake Engineering on August 9, 2000, Popp described several nests of broken and corroded wires—“areas of decay”—in a section of the rope which would have been on the drums at the time of the casualty, and therefore separate from and not involved in the actual area of parting. Exhibit K, Popp at 71-74. He observed that these broken and corroded wires “must have been there before the accident...Because they were not involved in the actual area of wire parting. They were on the drums.” Exhibit K, Popp at 73-74.

Both Popp and Parnell agree that there were several areas on the rope where the number of broken wires exceeded that allowable by ABS, as well as generally accepted industry standards requiring replacement of the wire. Exhibit Q, Parnell at 143-146; Exhibit EE, ABS Guide for Certification of Cranes at EC001312. Parnell testified at his deposition (the day after Popp’s) that the extent of corrosion and pitting at the break site as well at several other locations indicated that these conditions had existed for some time prior to the casualty. Exhibit Q, Parnell at 96-97, 104.

Taking into consideration Popp's observations, Parnell's own observations and further analysis of Popp's photos, as well as consultation with a colleague, Parnell<sup>9</sup> has concluded that the damage to the rope which led to the extent of the corrosion and pitting observed likely existed for as much as two years before the July 29, 2000 incident. Exhibit S, Parnell Supplemental Opinion. The pre-existing damage had been formed by obstructional contact, tears and external stripping of the wire. Exhibit Q, Parnell at 57. The wire rope had been severely chaffed and cut. Exhibit Q, Parnell at 97.

This supports Hislop's opinion that there were material defects on the wire rope at the time of the retrofit in China and that the rope should have been replaced at that time. Exhibit U, Hislop at 123. Finally, the wire rope on crane #4 had a fiber core which violated the recommendation of the manufacturer and is not as strong as a solid wire rope. Exhibit U, Hislop at 130-131; Exhibit M, Popp August 9/14, 2000 Inspection Report.

### **Conclusion**

The conclusion to be drawn is unmistakable. Not only should ABS never have approved the retrofit of the cranes for the Leon I, the luffing wire on crane #4 was the wrong size and design and exhibited considerable long term damage (two years) which required replacement at the shipyard during the time of the retrofit.

The 28-year old cranes retrofitted to the Leon I were not appropriate for the size and deck layout of the Leon I, and ABS should never have allowed or approved their installation. ABS was paid for and provided design input and supervisory services far beyond a routine inspection. ABS surveyor Graham was at the shipyard or on the ship every day for four weeks during the

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<sup>9</sup> During his deposition, Parnell was asked by Mr. Clyne, counsel for American Bureau of Shipping, the length of time that the corrosion and pitting damage to the wire ropes existed prior to the accident and stated that it could have existed back to or before the retrofit. Following his deposition, Parnell reviewed his own findings, Popp's findings and photographs and conferred with a colleague with whom he regularly collaborates and reached the more definitive opinion that the damage had existed for at least two years prior to the accident.

retrofit of the Yannis K cranes onto the Leon I. Letters and engineering drawings were exchanged between ABS and Eurocarriers regarding the cranes and their design and reengineering.

The luffing wire which ABS/Graham allowed to be reinstalled on crane #4 was not of the correct diameter or design (fiber core) for this application, and it contained numerous nests of broken and/or corroded wires exceeding the permissible number, as well as severe corrosion and pitting with loss of metal which had existed for at least two years before the casualty. These deficiencies, by ABS standards, required replacement of the wire at the shipyard during the time of the retrofit. The undisputed evidence is that the luffing wire on crane #4 at the time of the casualty was the same wire rope which ABS/Graham allegedly inspected, and approved for reinstallation on the retrofitted crane at the shipyard in Shanghai. The wire rope, however, was not suitable for such use and resulted in the death of two seamen and more than \$10,000,000 in property damage.

It would be economically impossible for every terminal operator or even for each port to inspect every vessel which calls to ensure that it is safe and seaworthy. Therefore, companies such as T&L, and their employees and stevedores, rely on classification societies such as ABS to follow and evenly apply their own standards for safety and seaworthiness for the protection of personnel and property. ABS overlooked its own standards as well as a standard of reasonable care and basic common sense in accepting and approving the retrofit of mechanically and operationally unfit and incompatible cranes and wires on the Leon I.

While T&L does not suggest that ABS has a duty to ensure compliance when it cites violations of its standards, here ABS took an active role, for which it was compensated, in undertaking a review of the design and execution of the retrofit, and it did so negligently. Had

ABS not approved and certified the retrofit, this tragedy would never have occurred. At the very least, there are numerous questions of fact presented here which preclude entry of summary judgment in ABS' favor.

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/s/  
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